# Commonwealth of Massachusetts Center for Health Information & Analysis (CHIA) Non-Governmental Application for Case Mix Data

This form is to be used by all applicants, except Government Agencies, as defined in 957 CMR 5.02.

<u>NOTE</u>: In order for your application to be processed, you must submit the required application fee. Please consult the fee schedule for the appropriate fee amount. A remittance form with instructions for submitting the application fee is available on the CHIA <u>website</u>.

#### I. GENERAL INFORMATION

APPLICANT INFORMATION		
Applicant Name:	Karen Schneider, PhD	
Title:	Senior Research Scientist	
Organization:	John Snow, Inc. (JSI)	
Project Title:	Lahey Health System Community Needs Assessment and Engagement Project	
Mailing Address:	44 Farnsworth Street, Boston MA 02210	
Telephone Number:	617-482-9485	
Email Address:	kschneider@jsi.com	
Names of Co-Investigators:		
Email Addresses of Co-Investigators:		
Original Data Request Submission Date:	July 2015	
Dates Data Request Revised:	September 2015	
Project Objectives (240 character limit)	To conduct a community health needs assessment for the Lahey Health System service area using secondary quantitative data (mortality, hospital discharge, demographics, BRFSS) and qualitative data (interviews, focus groups). This project is part of Lahey Health Systems communitybenefit program and will be used to support Lahey's strategic planning process to improve the community's health and access to health care.	
Project Research Questions (if applicable)	1.To what extent are inpatient and emergency department (ED) admissions preventable with appropriate primary care in the Lahey service area? Which conditions are the most common? How do these numbers compare with state rates?  2.Which communities in the Lahey Health System service area have the highest ambulatory care sensitive (ACS) ED rates? Which communities have the highest preventable hospitalization rates (i.e., AHRQ Prevention Quality Indicator (PQI) rates)?	

#### **II. PROJECT SUMMARY**

Briefly describe the purpose of your project and how you will use the requested CHIA data to accomplish your purpose. Lahey Health System is currently undertaking a community needs assessment and strategic planning process as part of its community benefit program. As part of this process, JSI has been contracted to analyze secondary data sources at the state, county and town/city levels to quantify community health need. With Lahey's community benefit program, they

aim to address health care access issues and conditions that could be prevented with the delivery of appropriate primary care. We propose analytizing the MA hospital discharge and emergency department data to estimate rates of ambulatory care sensitive conditions and preventable inpatient hospitalizations (AHRQ PQIs).

## III. FILES REQUESTED

Please indicate the databases from which you seek data, and the Level(s) and year(s) of data requested.

CASE MIX	Levels 1 – 6	Fiscal Years Requested
Inpatient Discharge	<ul> <li>☑ Level 1 – No Identifiable Data Elements</li> <li>☐ Level 2 – Unique Physician Number (UPN)</li> <li>☐ Level 3 – Unique Health Information Number (UHIN)</li> <li>☐ Level 4 – UHIN and UPN</li> <li>☐ Level 5 – Date(s) of Admission; Discharge; Significant Procedures</li> <li>☐ Level 6 – Date of Birth; Medical Record Number; Billing Number</li> <li>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE</li> <li>CHOSEN LEVEL: We are requesting data to estimate community level rates. We would like basic information included in the Level 1 access.</li> <li>This includes patient's town of residence.</li> </ul>	Requesting 2012-2014  1998 – 2013 Available (limited data 1989-1997)
Outpatient Observation	□ Level 1 – No Identifiable Data Elements □ Level 2 – Unique Physician Number (UPN) □ Level 3 – Unique Health Information Number (UHIN) □ Level 4 – UHIN and UPN □ Level 5 – Date(s) of Admission; Discharge; Significant Procedures □ Level 6 – Date of Birth; Medical Record Number; Billing Number PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:  NOT REQUESTING	Not requesting  2002 – 2013 Available
Emergency Department	<ul> <li>☑ Level 1 – No Identifiable Data Elements</li> <li>☐ Level 2 – Unique Physician Number (UPN)</li> <li>☐ Level 3 – Unique Health Information Number (UHIN)</li> <li>☐ Level 4 – UHIN and UPN</li> <li>☐ Level 5 – Date(s) of Admission; Discharge; Significant Procedures</li> <li>☐ Level 6 – Date of Birth; Medical Record Number; Billing Number</li> <li>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE</li> <li>CHOSEN LEVEL: We are requesting data to estimate community level rates. We would like basic information included in the Level 1 access.</li> <li>This includes patient's town of residence.</li> </ul>	Requesting 2012-2014  2000 – 2013 Available

### IV. FEE INFORMATION

u requesting Yes No  please submiting a fee waive entation of yes  complete on describe how marking, qual  JSI in nee servinge pre pro- stro	g a fee waiver?  Init a letter stating the basis for your request. Please refer to the fee schedule for qualifications iver. If you are requesting a waiver based on the financial hardship provision, please provide your financial situation. Please note that non-profit status alone isn't sufficient to qualify for a RSUANT TO 957 CMR 5.04 (Researchers, Payers, Providers, and Provider Organizations)
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JSI v nee serv inpo pre pro stro	
JSI v nee serv inpo pre pro stra	only if you are requesting Level 1 (de-identified) Case Mix.
JSI v nee serv inpo pre pro stra	ow you will use such data for the purposes of lowering total medical expenses, coordinating care
nee serv inpo pre pro stra	ality analysis or other administrative research purposes.
	I will analyze the hospital discharge data for the Lahey Health System's community health seeds assessment. We plan to estimate the percent of ED visits for residents of the Lahey's rvice area that is for ambulatory care sensitive conditions. We will also estimate AHRQ PQIs for patient discharges, which is the rate of discharges for conditions that are potentially eventable with appropriate primary care. The findings will inform Lahey's strategic planning cocess for its community benefit program, wich will involve identifying issues and adopting rategies that can help mitigate these issues. Results from prior community health needs seessments have informed, for example, the adoption of a ED diversion program.
	EQUESTS - PURPOSE AND INTENDED USE explain why completing your project is in the public interest.
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Please consult the fee schedules for Case Mix data, available at <a href="http://chiamass.gov/regulations/#957\_5">http://chiamass.gov/regulations/#957\_5</a>, and select

	3. Has your project received approval from your organization's Institutional Review Board (IRB)? Please note
	that CHIA will not review your application until IRB documentation has been received (if applicable).
	☐ Yes, and a copy of the approval letter is attached to this application.
	□ No, the IRB will review the project on
	No, this project is not subject to IRB review.
	☐ No, my organization does not have an IRB.
	4.
VII. A	PPLICANT QUALIFICATIONS
	1. Describe your qualifications to perform the research described or accomplish the intended use of CHIA data
	Dr. Schneider received a PhD in epidemiology from Brown University in 2007. She joined JSI soon after and has served as a statistician on multiple community health needs assessments for hospitals and local health departments. She has conducted similar analyses (e.g. calculating AHRQ PQIs) for hospitals in other states including New Jersey and Connecticut. She will be responsible for drafting the analysis plan, conducting the analyses, interpreting the results and presenting the findings. She will be the only individual with access to the data.
Note: I Data li	2. Attach résumés or curricula vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data. (These attachments will not be posted on the internet.) DATA LINKAGE AND FURTHER DATA ABSTRACTION Data linkage involves combining CHIA data with other databases to create one extensive database for analysis. Inkage is typically used to link multiple events or characteristics that refer to a single person in CHIA data within tabase.
1.	Do you intend to link or merge CHIA Data to other datasets?
	☐ No linkage or merger with any other database will occur
2.	If yes, will the CHIA Data be linked or merged to other individual patient level data (e.g. disease registries, death data), individual provider level data (e.g., American Medical Association Physician Masterfile), facility level (e.g., American Hospital Association data) or with aggregate data (e.g., Census data)? [check all that apply]  Individual Patient Level Data  What is the purpose of the linkage:
	What databases are involved, who owns the data and which specific data elements will be used for linkage:
	☐ Individual Provider Level Data

What is the purpose of the linkage:

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	What databases are involved, who owns the data and which specific data elements will be used for linkage:
	☐ Individual Facility Level Data
	What is the purpose of the linkage:
	What databases are involved, who owns the data and which specific data elements will be used for linkage:
	We will be using AHRQ PQI SAS code available on the AHRQ website. Per this code, hospital discharge data will be linked to Census data for two purposes: Census data provide the denominator for the rates (the "at-risk" population); and Census data also are used to produce risk/age- adjusted rates.
	What databases are involved, who owns the data and which specific data elements will be used for linkage:
	Census population counts, stratified by age, race and sex at different geographic levels. The Census Bureau owns the data and the data are publicly available at American FactFinder.
r pro	for each proposed linkage above, please describe your method or selected algorithm (e.g., determinibabilistic) for linking each dataset. If you intend to develop a unique algorithm, please describe how the will link each dataset.
	The linkage only applies to calculating AHRQ PQIs. The Census data will be used to age-adjust the discharge rates.

4.	If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.		
	The AHRQ PQI SAS program produces summary statistics (not individual level data). All data will be reported in the aggregate (state, county and town levels). We will also use suppression standards, not reporting rates with <10 observations (numerator of the rate).		
5.	If yes, and the data mentioned above is not in the public domain, please attach a letter of agreement or other appropriate documentation on restrictions of use from the data owner corroborating that they agree to have you initiate linkage of their data with CHIA data and include the data owner's website.		
	JBLICATION / DISSEMINATION / RE-RELEASE  Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such data in any paper, report, website, statistical tabulation, seminar, conference, or other setting.		
	We will report results from the analyses to the Lahey Board of Directors and internal staff involved in the community needs assessment and strategic planning process. It is also possible that we would report the rates in community report cards (paper), if significant (p<0.05) geographic disparities are identified.		
2.	Will the results of your analysis be publicly available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee.		
	A member of the community or government could request a copy of the community health report card from Lahey and Lahey would send it to them electronically. There would be no fee associated with the report card.		
3. □ ⊠	Will you use the data for consulting purposes? Yes No		
<b>4</b> . □	Will you be selling standard report products using the data? Yes No		
5. □ ⊠	Will you be selling a software product using the data? Yes No		
6.	Will you be reselling the data?		

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	Yes
$\boxtimes$	No
	es, in what format will you be reselling the data (e.g., as a standalone product, incorporated with a software oduct, with a subscription, etc.)?
	N/A
7.	If you have answered "yes" to questions 3, 4 or 5, please describe the types of products, services or studies.
	N/A

## X. USE OF AGENTS AND/OR CONTRACTORS

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the CHIA Data.

	Company Name:	None	
	Contact Person:		
	Title:		
	Address:		
	Telephone Number:		
	E-mail Address:		
	Organization Website:		
8.	Will the agent/contractor have access to the data at a location other than your location, your off-site serve and/or your database?  Yes  No If yes, please provide information about the agent/contractor's data management practices, policies and procedures in your Data Management Plan.		
9.	Describe the tasks and p	roducts assigned to this agent or contractor for this project.	
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10.	Describe the qualificatio	ns of this agent or contractor to perform such tasks or deliver such products.	
11.	Describe your oversight	and monitoring of the activity and actions of this agent or subcontractor.	
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#### XIII. ASSURANCES

Applicants requesting and receiving data from CHIA pursuant to 957 CMR 5.00 ("Data Recipients") will be provided with data following the execution of a data use agreement that requires the Data Recipient to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data.

Data Recipients are further subject to the requirements and restrictions contained in applicable state and federal laws protecting privacy and data security, and will be required to adopt and implement policies and practices to protect CHIA data in a manner consistent with the requirements of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

Data Recipients must promptly notify CHIA of any unauthorized use or disclosure of CHIA data.

By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) my organization's ability to meet CHIA's minimum data security requirements; and (3) my authority to bind the organization seeking CHIA data for the purposes described herein.

Signature:	And Colle
Printed Name:	Karen L. Schneider, PhD
Original Application Submission Date:	July 7, 2015
Dates Application Revised:	September 22, 2015